

WE CLAIM:

1. A plasma display panel with barrier ribs configured in a closed shape comprising:
 - a plurality of sub-pixel cells each having a cell area defined by said closed shape barrier ribs;
 - a plurality of said sub-pixels cells in a delta configuration defining a color pixel;
 - a plurality of sustain electrodes each spaced apart in a row direction at a predetermined cell length;
 - a plurality of data electrodes overlapping a wall of said barrier ribs in a column direction, each of said data electrodes extending under said cell area.,wherein
 - a dual scan gap of a predetermined gap length is formed between a pair of said data electrodes in the column direction, and
 - a gap is formed between said row barrier ribs and said data electrodes, and said gap is positive or negative .
2. The panel of claim 1, wherein said gap is less than 45% of said cell length.
3. The device of claim 1, at least one of wherein said gap is less than 40%.

4. The panel of claim 1, wherein said gap length is smaller than said cell length and said gap length crosses over one of said row barrier ribs.

5. The panel of claim 1, wherein said data electrodes has an expanded portion in said cell area.

6. The panel of claim 5, wherein said expanded portion is of a rectangular shape.

7. The panel of claim 1, wherein said gap length is greater than said cell length and said gap length crosses over one of said row barrier ribs.

8. The panel of claim 1, wherein said gap length is greater than said cell length and said gap length crosses over two of said row barrier ribs.

9. A plasma display panel with barrier ribs configured in a closed shape comprising:

a plurality of sub-pixel cells each having a cell area defined by said closed shape barrier ribs;

a plurality of said sub-pixels cells in a delta configuration defining a color pixel;

a plurality of bus electrodes each spaced apart in a row direction at a predetermined cell length;

a plurality of data electrodes overlapping a wall of said barrier ribs in a column direction, each of said data electrodes partially extending under said cell area., wherein

a dual scan gap of a predetermined gap length is formed between a pair of said data electrodes in a column direction, and

each of said gap length crosses over two of said row barrier ribs.

10. A method of constructing a plasma display panel with barrier ribs configured in a closed shape, said method comprising the steps of:

configuring a plurality of sub-pixel cells each having a cell area by partitioning said barrier ribs;

defining a color pixel through said sub-pixels cells in a delta configuration;

disposing a plurality of sustain electrodes in a row direction and spaced apart at a predetermined cell length;

positioning a plurality of data electrodes to overlap with a wall of said barrier ribs in a column direction, each of said data electrodes extending under said cell area., wherein

a dual scan gap of a predetermined gap length is formed between a pair of said data electrodes in a column direction, and

a gap is formed between said row barrier ribs and said data electrodes.

11. The method of claim 10, at least one of wherein said gap is less than 45% of said cell length.

12. The method of claim 10, at least one of wherein said discharge gap is less than 40%

13. The method of claim 10, wherein said gap length is smaller than said cell length and said gap length crosses over one of said row barrier ribs.

14. The method of claim 10, wherein said data electrodes have an expanded portion for additional coverage under said cell area.

15. The method of claim 10, at least one of wherein said gap length is greater than said cell length and said gap length crosses over one of said row barrier ribs.

16. A plasma display panel with barrier ribs configured in a closed shape comprising:

a plurality of sub-pixel cells each having a cell area defined by said closed shape barrier ribs;

a plurality of said sub-pixels cells in a delta configuration defining a color pixel;

a plurality of sustain electrodes each spaced apart in a row direction at a predetermined cell length;

a dual scan gap of a predetermined gap length is formed between a pair of said data electrodes in the column direction, and said dual scan gap under barrier ribs.